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EDITORIALS

WIRE YOUR CONGRESSMEN NOW— —There are shenanigans going on in Washington that merit the immediate attention of every business man. As everyone knows, the House Ways and Means Committee is conducting hearings April 7 thru April 15, concerning labor legislation. The labor bosses have literally jammed Washington to demand that the working man (or the labor bosses) be protected by Federal legislation. Specifically, the hearings will be directed primarily to the Kennedy-Karsten measure, which would *require states to re-write their unemployment compensation laws to fit Federal dictates.* They will also cover numerous other Federal legislative proposals in the unemployment insurance field.

Concerning the Kennedy-Karsten measure, HR-3547, and its companion piece S-791, in the Senate, a recent release accompanying an Indiana Canners Association Bulletin had this to say "This Legislation would impose rigid Federal controls converting unemployment compensation in the United States to the image of Eureopean 'Welfare-State' patterns."

The following, taken from the ICA release, explains the proposed legislation in detail. Readers opposing this type of control might well write or wire their congressmen and senators, and the Honorable Wilbur D. Mills, Chairman of the House Ways and Means Committee in Washington. Letters sent in triplicate to Mr. Mills may include the request that they be made a part of record of the hearings. Regardless of how your state laws compare with Indiana's, you will undoubtedly want to register vigorous objection to this "leap-into-socialism." Here is the Indiana summary:

"The Kennedy bill, as it is commonly known, would *compel Indiana* to reshape its unemployment compensation program along the following rules:

1. To pay maximum unemployment benefits of *$60 weekly, or more*—to meet the federal rule that the maximum benefit in each state must be *equal at least to two-thirds of the average weekly wage* of persons covered by unemployment compensation.
2. To guarantee *uniform* duration of 39 weeks. (That is, a person eligible for any unemployment benefits would be entitled to a full 39 weeks of them in any one-year benefit period.)
3. To *eliminate any disqualifications*, even for fraud, which would reduce benefit rights below the 39 weeks of entitlement.

THE BILL WOULD SPECIFY *ceilings on benefit-eligibility requirements* above which Indiana and other states might not go . . . would *invite the elimination of experience rating* by authorizing flat-rate tax reduction for all employers in lieu of individual-employer exeperience rating . . . *would extend unemployment compensation coverage* to employers of one or more persons any time of the year . . . and would *open the federal treasury* to the partial financing of profligate spending programs, via unemployment benefits, in which individual states might engage.

Whereas Indiana now offers maximum unemployment benefits of $33 weekly for up to 20 weeks for a potential total of $660 (and $36 for 26 weeks for a *total of $936 after next July 4*), the Kennedy bill would require potential maximum benefits of at least *$2,340 in a year's period.*

Whereas under present Indiana law the unemployment benefits may not equal more than $1 of benefits for each $4 of wages, the application of the Kennedy controls to the Indiana benfit formula would permit *$1,500 in wages to qualify a person for $2,540 in unemployment benefits.* In other words, $1 in wages could qualify a person for $1.56, or thereabouts, in benefits. This would be true even in cases of self-created unemployment, such as a person's abandonment of his job.

Conservative estimates are that the Kennedy bill *would increase unemployment compensation costs by a minimum of 70 to 75 per cent in Indiana.* A 70 per cent increase applied to the $82,800,000 paid out in benefits in Indiana in 1958 would have meant a boost of $58,000,000 in the cost of doing business that year.

OPENING OF THE FEDERAL TREASURY to the partial financing of unemployment benefits would be accomplished through the proposed giving of federal "free" money (grants) under specified conditions, to finance three-fourths of costs of benefits that are in excess of 2 per cent of the taxable payroll in any state. Hence, for benefit payments above the level represented by 2 per cent of taxable payrolls, *any state could go on a benefits spending spree and bring in $3 from the federal treasury for each $1 it spent of its own tax funds.*

Although President Eisenhower publicly has stated that there will be no administration support of the proposed arbitrary federal standards in unemployment compensation, Washington observers feel that the *current threat of legislation virtually wiping out jurisdiction of the states over unemployment compensation remains critical.* They point out that in the initial introduction of the Kennedy-Karsten measure, 34 Senators and some 125 Representatives committed themselves to its support. The bill has strong support from organized labor groups."

pH of Salt and Brine

by
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SUMMARY

Pure sodium chloride in aqueous solution has a pH of 7 and zero buffer capacity. Variations from these values are due to the presence of impurities, errors in measuring technique, and other factors. Recommendations are given for practical procedures for pH determinations.

Frequent inquiries from customers interested in product specifications have led to this review of the question of pH of salt and brine. According to the dictionary, "pH is the negative logarithm of the hydrogen ion concentration in gram mols per liter". To most technicians pH is just a number indicated by the pointer of a pH meter. However, a study of the principles of the physical chemistry involved* will show that the problem is not quite as simple.

pH is a measure of the quantity of hydrogen ions active in a solution and, thereby, it is a measure of the *effective* acidity or alkalinity. Because most chemical processes are sensitive to change in acidity, pH is a prime control factor. Generally, it is sufficient to establish the pH limits of efficient operation and to hold the process and the products within these limits, without recourse to any theory. In this sense, pH has become an operational concept of deceptive simplicity. However, when pH measurements are not reproducible, or when the values do not seem to fit a rational pattern, a review of the underlying principles becomes necessary.

Strictly speaking, a crystalline solid, such as salt, does not have any pH value. The source of hydrogen ions in a salt solution is the solvent, water, and unless the salt is dissolved, one cannot conceive of hydrogen ions or pH. Still, one speaks of the "pH" of salt, and what is meant is the pH set up by the salt in solution.

Although pH can be determined in a variety of ways, for all practical purposes, only the measurement by means of an electronic pH meter need be considered here. Problems connected with the measurement of pH in brine can be classified in two groups. The first group may be called "instrumental", and it includes all errors inherent in the technique. The second group of problems is due to the fact that "the true pH value" of the salt (NaCl) solution is a rather elusive quantity.

THE TECHNIQUE

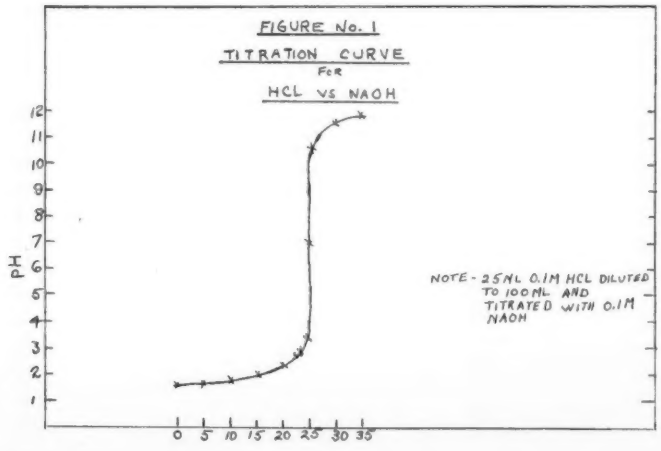
Of the possible instrumental or measuring errors, with reference to brine, probably the most important has its origin at the "liquid junction". At this junction, an electrical potential can arise which then adds to the potential due to the hydrogen ions, and completely faulty pH readings are obtained. Errors due to this effect can amount to several pH units, and it is virtually impossible to predict the magnitude of the errors once the technique is faulty. For this reason, the principles involved merit detailed scrutiny.

In all electronic pH determinations, the electrical potential set up by the working electrode immersed in the sample, is measured against the potential of a reference electrode. To complete the circuit, the sample and the reference electrode are joined by a conducting salt bridge which then forms a liquid junction. It is at this point that the liquid-junction potential develops, because an electrical potential arises whenever two solutions of different composition are brought together. Commercial electrodes are constructed in such a way as to reduce this potential to a manageable value. The bridge contained in the reference electrode is filled with saturated KCl solution. Thereby, the net potential is much diminished, since the potassium and chloride ions, present at both ends of the bridge, dominate the conduction of the current. This is true with ordinary aqueous samples. It is not true, however, with concentrated brine (NaCl), because the sodium concentration will far exceed the concentration of potassium at the junction with the sample.

In commercial calomel electrodes, there is always a flowing junction. The KCl solution is slowly discharged into the sample by gravity through a capillary passage. However, when measuring the pH of concentrated sodium chloride solutions, a junction potential can arise because the small hydrostatic pressure may not suffice to establish an even downward flow. In consequence, a liquid junction of varying characteristics result as the sample mixes with the KCl solution in the capillary space. When this happens, the meter readings lose reproducibility.

The glass electrode can also be a source of error. One of the defects of the glass electrode is that it functions as a mixed electrode at higher pH values, reflecting the sodium ion concentration together

*See, e.g., R. G. Bates, Electrometric pH Determinations, John Wiley & Sons, Inc., New York.



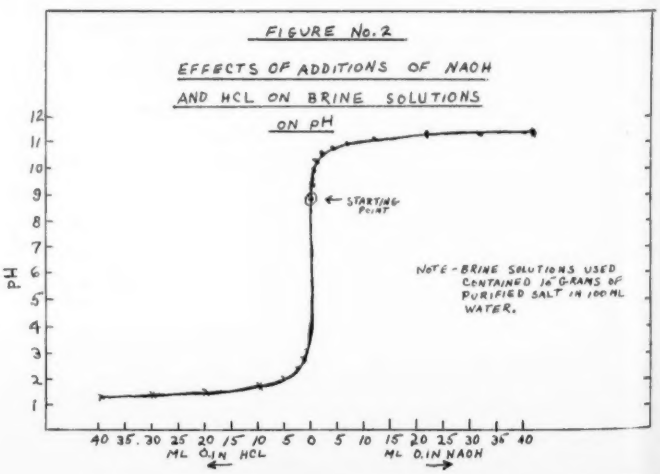


FIGURE No. 2
EFFECTS OF ADDITIONS OF NAOH
AND HCL ON BRINE SOLUTIONS
ON pH
pH
STARTING POINT
NOTE - BRINE SOLUTIONS USED CONTAINED 16 GRAMS OF PURIFIED SALT IN 100 ML WATER.
ML 0.1N HCL
ML 0.1N NAOH

with the hydrogen ion concentration. In consequence, in brine of high alkalinity, the pH readings are much depressed. At room temperature, and in the range of moderate pH values (up to pH 8), this effect is small with most electrodes and will not exceed other measuring errors. For brine it is always advisable to employ lithium glass electrodes where the "sodium error" is but a fraction of that of the ordinary glass electrodes. These electrodes are commercially available, usually under the name of high alkalinity electrodes.

One additional source of significant errors in pH determination in salt solutions merits special attention. This is the large electrical conductivity of concentrated salt solutions. When such solutions are spilled and adhere to the outside of the glass beaker, they form a ground connection. It is equally important to see to it that the agitator, when used, should not form a ground connection. The latter is easy to prevent by using a magnetic stirrer. If a mechanical stirrer is used, it should always be equipped with a glass paddle and care should be taken that the solution should not make contact with the metal chuck.

For most of the errors in the technique, discussed in the foregoing, there is a simple remedy: *Dilution of the concentrated salt solutions.* In more dilute solutions (5-10%), all errors are either eliminated, or at least minimized, the junction potentials become negligible and the sodium error virtually disappears. The effect of dilution itself on the pH value is small. pH is, by definition, a logarithmic unit. It is, therefore, very insensitive to dilution effects. E. g., fully tenfold dilution will change the value of the sample by one pH unit at most. In the case of buffered solutions, the change of pH upon dilution will be quite negligible.

For added precaution, lithium glass electrodes and a sleeve-type reference electrode should be employed. If the pH meter is functioning properly and precautions against grounding the sample solution are taken, reproducible results will be obtained. The only remaining factor of major importance is the quality of the water used as solvent. This question is discussed in detail in the following section.

TRUE pH VALUES

A reproducible pH value is only part of the answer in problems of measurement. A key question is whether the value found represents the *true* pH of brine and salt.

Pure sodium chloride (NaCl), in solution, has a neutral pH and zero buffer capacity. This can be illustrated best by a complete titration curve of hydrochloric acid with sodium hydroxide. In Figure 1., the pH is plotted against the proportion of base added. Initially, there is virtually no change in pH value. The solution represents a mixture of HCl and NaCl, with the acid concentration decreasing only gradually. However, close to neutralization when over 99% of the acid is used up, a small quantity of base will cause a sharp reduction of the residual acid concentration, and the pH rises steeply. Exact equivalence is near pH 7.0, which represents the "pH of NaCl". A slight excess quantity of sodium hydroxide will push the pH to high values. Further addition will then have relatively little effect on pH. It is evident that absolutely pure salt is neutral (pH 7), and it has no buffer capacity in the usual sense, since traces of both free acid and free base will alter the pH value drastically.

Figure 1. is a theoretical curve, and is applicable only to chemically pure sodium chloride solutions. Actually, commercially purified salt deviates from this picture only slightly. In Figure 2. is shown a reconstructed "titration curve" of a commercial product. The two branches of the curve were obtained by adding hydrochloric acid and sodium hydroxide to two separate samples of a 15% salt solution.

The "starting" point of the curve in Figure 2. (pH 8.8) indicates the presence of alkali in the salt. Since less then 0.1 ml of 0.1 normal hydrochloric acid was sufficient to reduce the pH to neutral, it can be calculated that the salt contained the equivalent of only about 25 ppm sodium hydroxide. This emphasizes the fact that minute traces of impurities can cause great changes in pH.

The actual pH value of a salt solution will be determined essentially not by the salt itself, but by the other materials contained in the system. The carbon dioxide content of the air will quickly establish a weak bircarbonate buffer with the trace of free alkali present in commercial salt, and the solution will assume a value close to pH 8. Dilute as this buffer system is, it will have some tendency to maintain this pH value, until substantial quantities of acid, base or buffer salt are introduced. In practice, most frequently materials are admixed which have the character of a buffer, and the salt solution will change immediately to a new pH value.

The quality of the water used as solvent or diluent is of great importance. Only if purest water is employed, which has been freed even of dissolved gases by prolonged boiling, can the "true" pH of a salt solution be obtained. Morever, the solution should have no contact with the atmosphere throughout the measurement. To carry out pH determinations with such precautions is not impossible but cumbersome. Moreover, the practical value of the results so obtained is questionable. They will disclose the true pH—but this value is so easily altered, as to hardly ever be manifest in practice.

A practical approach to the measurement of pH is to employ conditions approximating those of the end-use. The diluent should still be pure water, but if the system is ordinarily in contact with air, the measurement would be made in an open beaker. This approach serves as a quick screening method for unusual or unsuitable commercial salt. It too has a serious drawback in that it will not reflect the "true" pH of the salt proper, and it does not permit easy intercomparison between different laboratories.

Evidently, there is no universally applicable or ideal method for the measurement of the pH of salt. However, with a little care, gross errors can be avoided. The balance of the difficulties is then overcome by an intelligent interpretation of the results.

ACKNOWLEDGEMENT

The assistance by members of International Salt Company's Technical Staff in the preparation of this paper is gratefully acknowledged.

GRAPE JUICE QUALITY IMPROVED BY RESEARCH

Changes in the grape juice industry brought about by research at Cornell's New York State Experiment Station at Geneva play an important part in the attractively colored, high quality product now available to consumers, say Station food scientists in commenting on recent progress in fruit juice research.

"The grape juice industry has shifted almost entirely from the old method of storing juice in 5-gallon carboys until bottled for sale to cool storage in tanks held at 22 to 28 degrees Fahrenheit," they explain, adding that earlier experiments at the Station demonstrated the detrimental effects of excess heating on juice quality.

"In the carboy storage, juice sometimes remained above 100 degrees for days at a time and seldom retained the bright color and full flavor of freshly pressed juice so characteristic of the present fine product.

"For modern cool tank storage, the freshly pressed juice is flash pasteurized at 175 to 185 degrees, cooled rapidly to about 32 degrees, and then pumped into storage tanks. Here the juice is held in cool storage until market demands justify pasteurization and bottling. Cool tank storage also enables the processor to spread distribution of high quality grape juice throughout the year."

Recently, research at the Experiment Station has dealt with the possibility of yeasts developing in juice stored in the tanks. Much to everyone's surprise, it was found that some types of yeasts actually grow better at a temperature just above freezing than at room temperature. "The mere presence of yeasts in grape juice is unimportant in itself," continue the scientists, "but if they grow and multiply sufficiently to alter the product they may cause serious losses to the industry."

The Station investigations have identified the types of yeasts occuring in grape juice, revealed the chief sources of contamination, and throw light on conditions under which yeasts can grow and multiply. A method for predicting yeast contamination and thus avoiding losses is expected to aid the grape juice industry still further in maintaining a high quality, full-flavored product.

New to the food field is Alcoa's Flavor-Lok closure for baby food. The cap twists on and off, thus providing a closure that can be removed and resealed with a twist of the wrist. Because it is a screw-on cap, it will remain on jars that have been opened, with no danger of spilling.

New Baby Food Cap

A new concept in baby food packaging is now available from Aluminum Company of America. Alcoa has introduced an aluminum screw-on cap offering outstanding convenience to mothers.

Because it is a screw cap and affords a tight seal when recapped, it eliminates the hazard of spilling the contents of jars that have been opened and resealed, and then placed in the refrigerator or in an infant's travel kit.

The closure is a two-piece cap, composed of a sealing disc and a band to keep the disc in place. A ring of special plastic compound which serves as a gasket, is inserted into the disc and sealed to the inside of the closure by means of heat and pressure.

The caps are applied to jars by the Alcoa RO (roll-on) principle. In this process, straight-sided closures are placed on the jar, then the sides are formed to the glass threads by rollers in the capping machines.

The new closure carries an inside coating of a highly resistant, pigmented lacquer to guarantee purity and to resist corrosion.

HOW IT WORKS

The sealing disc and band move independently of each other, but do not separate when the cap is removed from the jar. Rotating the outer band lifts the sealing disc from the jar without turning it. This provides easier removal, since the high vacuum in the jar makes a one-piece closure difficult to loosen.

This difficulty is heightened by the fact that a one-piece closure must be broken free from the glass in a sliding motion. Such action does not take place with the new closure. Turning the outside band lifts, rather than slides, the sealing disc from the glass.

Threads on the glass jars are tapered—as are the caps—to provide quick and easy removal of the closure.

The new Alcoa Flavor-Lok closure for baby food is currently being test marketed by H. J. Heinz Co. on a number of its varieties.

New design glass containers for Oxford Pickle Line reached the market about October 1, 1958. Volume has increased steadily since then and they now plan on adding a companion 28 oz. size in glass to this line. Glass containers by Brockway Glass Co.; labels by Tompkins Label Company, and closures by White Cap.

GOLD COLOR DEVELOPED BY HAZEL-ATLAS

"Giltgold", a baked-on, textured metallic color resembling gold for use in pre-applied labels has been developed by the Hazel-Atlas Glass Division of Continental Can Company and is now being made available commercially.

Introduced as a possible replacement for 22 Karat gold by packers and bottlers who desire less expensive labels but still want the lustrous effect of gold, the new synthetic color does not cost any more than conventional ceramic colors applied to glass containers by Hazel-Atlas' exclusive Deco-Fire process.

This non-tarnishing, distinctive gold color offers unusual economies in screened-on labels for one trip containers.

American Stores Company of Philadelphia, Pennsylvania, is packaging its Ideal Peanut Butter in an attractive tapered glass jar manufactured by the Hazel-Atlas Glass Division of Continental Can Company. The 1-pound 4-ounce clear glass jar is simply decorated with a label featuring the brand and product names in yellow, blue, red and white colors. A White Cap Company "Twist-Off" cap, lithographed in colors matching those on the label, is employed to close the jar. This jar is part of a 3-size family line.

FMC INTRODUCES NEW TYPE OF CAN FILLER

Filling of granular free-flowing food products into cans reaches new standards of efficiency, accuracy and speed with the introduction of Food Machinery and Chemical Corporation's Model ST Flexi-Filler.

Embodying new and revolutionary features, this 24-pocket filler permits speeds up to 300 cans per minute for 303 x 406 cans. Although designed for semi-automatic operation, a fully automatic operation can be obtained with the addition of an automatic hopper and an adjustable brush on the filling top.

FMC's new filler, manufactured by the Canning Machinery Division, is a flexible machine as the name implies. It is available as a 12, 18 or 24 pocket filler, depending on can sizes employed and speed requirements. Filler tops are interchangeable on the same machine base, and can diameters the filler will handle range from 211 to 603. Moreover, many can size combinations may be employed on a given model without requiring any change parts whatsoever.

The flexibility feature of this machine is also carried out with regard to adjustments. The telescopic filling pockets, for example, can be vertically adjusted within given ranges to control volume for various can sizes. The can feed conveyor, including spiral timer, guide rails and lug chain, is similarly adjustable to meet various requirements within a given range.

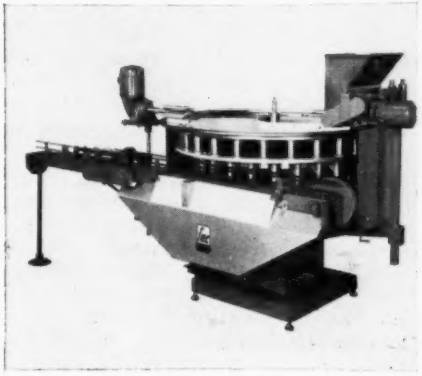
Other features include individual pocket cut-off plates, thereby eliminating the conventional dead plate design; a "No-can No-fill" device that prevents loss, and a straight line can travel that accelerates speed while virtually eliminating can damage. All normal accessories such as brushes, hoppers, vibrators, etc. may be applied to the machine for a specific operation.

A wide variety of food products, as well as such specialty products as popcorn, candies, nuts and confectionery items, can be filled into cans with the utmost efficiency. Typical products include: berries, cherries, prunes, apricots, peaches, beets, carrots, potatoes, lima beans, kidney beans, and hominy. The Flexi-Filler will handle these products in virtually any desired form, whole, sliced, diced or shoestring (Julienne).

For additional information write to Food Machinery and Chemical Corporation, Canning Machinery Division, Box 1120, San Jose, California, or 103 East Maple Street, Hoopeston, Illinois or the "Canning Trade."

EQUIPMENT AND SUPPLIES

For further information about new equipment on this page write: The Canning Trade, 20 S. Gay St., Baltimore 2, Md.



New FMC Model ST Flexi-Filler

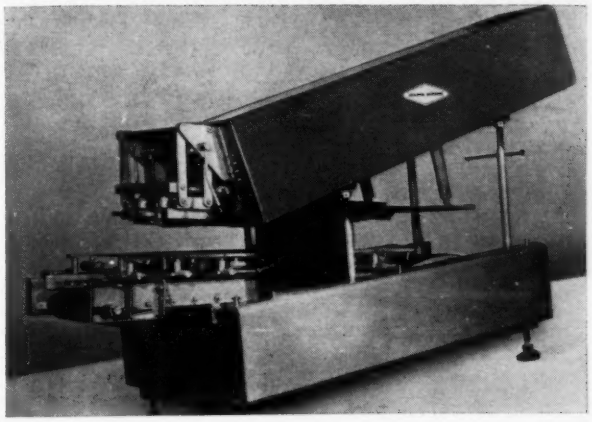
NEW STAND-UP ELECTRIC LIFT TRUCK—features compact design, full vision of forks from driving position, direct steering, fast maintenance of all electrical contacts and hydraulic controls which are mounted on the undersides of the hinged top, and exceptionally rigid construction consisting of 2-inch plate steel sides and 9-inch solid steel base plate. These features are based on the "Brute" Series which was used as the prototype. This new truck is designated the HUSTLER, DTL Series. Additional information may be acquired by writing "Canning Trade."

AMERICAN CAN TO UNVEIL KRAUT CAN FILLER

Representatives of the American Can Company will explain the new mechanical kraut can filling machine it has under development at Geneva, N. Y. on May 7. The kraut industry has long looked forward to the time when a mechanical filler would become an actuality.

It is expected that experimental machines will be in operation during the coming season and the introduction of a commercial machine will depend on the progress made during the 1959-60 season.

Dr. Carl Pederson of the Geneva staff, will supervise a kraut cutting bee at Geneva on May 7 and 8.



Atkron, Inc., of Cuyahoga Falls, Ohio, manufacturer of bottle and can handling equipment for the food, beverage and chemical industries, announce the manufacture of this Full-Range, Half-Depth Bottle Uncaser, under the firm's new trade name, "Atkron Dumore". The Uncaser features continuously operating conveyors to control bottles and cases through the unit without the necessity of infeed timing. Interchangeable metal finger assemblies and infeed gate castings permit uncasing 6- to 32-ounce bottles from 3-wide and 4-wide half-depth cases.

NEWS and Personals

The Larsen Company, Green Bay, Wisconsin—Leonard Berth, assistant production manager of the company's plant at Green Bay since February 1957, has been made operations director, according to announcement by Mark H. Mitchell, new president of the firm. Mr. Berth joined Larsen 10 years ago as a food technologist, served as quality control manager, and then managed the company's Fort Atkinson, Wisconsin, plant.

Diplomat Foods, North Bergen, New Jersey, packers of chicken specialty items, is introducing a line of Spanish style foods, and directing an intensive campaign to the Puerto Rican market in the New York area. It is conservatively estimated that the market consists of something over 1 million Spanish speaking Americans. The labels on the canned products feature "Diplomat" on the English side, and "Diplomatico" on the Spanish side. Harry R. Socolof heads the company as president, Eitel Sander is Vice President, and Edgar A. Genovese is assistant to the president.

Minute Maid Corporation—Russell T. Brankley and Stanley M. Kreider have been named Atlantic Division managers for the Minute Maid and Snow Crop labels, and will coordinate frozen concentrate sales with Gay H. Pryor, Inc. of Rosemont, Pennsylvania, brokers for the firm in lower New Jersey, Pennsylvania, Delaware, Maryland, Washington, Virginia, and West Virginia. Messrs Brankley and Kreider replace R. T. Dobarganes who becomes Gulf District manager for the Minute Maid label, and will supervise sales activities in Texas, Oklahoma, and Colorado, working with the company's brokers in those states.

National Preservers Association has put into book form the results of a study about consumer and retailer food attitudes, which gives information on attitudes towards sugar, purchasing habits, home canning, dieting, brand policy, use of preserves, attitudes toward other foods, price policy, and many other areas. The 158-page spiral bound book reports on 101 interviews made in the principal marketing areas. Three hundred copies are being made available—first come first served basis—at $5.00 per copy. The Association's offices are located at 1346 Connecticut Avenue, Northwest, Washington 6, D. C.

Corn Products Sales Company — Howard C. Harder, controller, has been named vice president-financial, and will be responsible for all of the company's financial policies and activities. Harold Hellman, executive assistant to the president, has been named vice president-administration, where in addition to his position of assistant to the president, he will also be responsible for long range planning for the company.

Pet Milk Company has renewed its television contract with Red Skelton and CBS-TV. Pet is an alternate week sponsor of the Red Skelton Show, which is viewed on CBS every Tuesday night at 9:30 P. M. EST, and televised by more than 175 stations. Products featured on the show include Pet Evaporated Milk, Instant Non-Fat Dry Milk, and Pet-Ritz Frozen Pies.

Hunt Foods has appointed Harvey A. Thielke, New York regional sales managers, replacing L. Roy Lind, who will assume a new management position with the company. John Weiller becomes Hunt's New York district manager, replacing Chester J. Regis, who will fill the newly established position of key accounts manager. New York Sales Region offices are at 109 Marsh Street, Port Newark, New Jersey.

Dole-Hawaiian Pineapple Company has appointed two new district sales managers serving New York and Chicago. John C. Pasko becomes Eastern District sales manager with headquarters in New York City, with territory including principally New York City, Philadelphia, Baltimore, Washington, and Eastern portions of Pennsylvania and Virginia. Raymond S. Niles becomes district sales manager in Chicago covering the territory including Chicago, Minneapolis, Milwaukee, St. Louis, Memphis, and Indianapolis.

Norman "Shorty" Schreiber, in charge of Indiana operations of the **Fall River Canning Company** of Wisconsin, is confined to the Wisconsin General Hospital undergoing treatment for a serious liver ailment. His many friends will be pleased to learn that latest reports show that he is improving satisfactorily in preparation for an operation.

Pennsylvania Canners Association will hold a Spring Get-Together Meeting at the Bedford Springs Hotel, Bedford, Pennsylvania, Friday, May 15. The Board of Directors and a number of committee meetings will be held at that time, to which all members are invited. The Annual PCA Golf Tournament will be held and there will be opportunities for other types of recreation. Reservations should be made directly with the Bedford Springs Hotel, and President Jack R. Grey requests that he be notified by those who expect to attend.

The National Institutional Wholesale Grocers Association, the principal business of members is the distribution of foods and related items to the food service industry, will meet at the Drake Hotel, Chicago, on Monday, May 11.

Crown Cork & Seal Company has appointed Al B. Sheen sales manager of the company's Midwest Region with headquarters in Chicago, where he will be responsible for sales of all the company's products in the states of Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, North and South Dakota, Colorado, and a portion of Wyoming.

The Fleming Company, Topeka, Kansas, wholesale food distributors, will begin construction immediately on a 255,300 square foot distribution center warehouse in the Westgate Industrial District. The company claims the Center will be the most modern and efficient in North America, and is expected to greatly lower distribution costs. The company will retain its present warehouse on East 17th Street, but the Topeka Division office will be moved to new headquarters just north of the warehouse. Staff offices will remain in the Garlinghouse Building.

DEATHS

Clarence Stoffers, prominent in the wholesale grocery business at San Francisco, Calif. for forty years, and well known by the canning trade, died there April 3 at the age of sixty-six years. His business life was spent with C. W. Stoffers & Co., 1721 Fifteenth St., a business founded by his father.

Michgian Canners & Freezers Association will hold its Spring Meeting at the Whitcomb Hotel, St. Joseph, June 14 and 15. The Fall Meeting of the Association will be held at the Pantlind Hotel in Grand Rapids, November 22 and 23.

John M. Heimen, Jr., manager of **Continental Can Company's** Metal R & G Packaging Engineering Laboratories, was one of the featured speakers at the Southeastern Conference on Better Foods for Better Nutrition, held recently at the University of Georgia in Athens. Mr. Heimen described some of the dynamic changes in food processing and packaging made necessary to keep pace with scientific and technological advancements in other fields. "The right package", he said, "not only produces the initial sale, but must assist the product and give the consumer complete satisfaction, and thereby encourage repeat sales."

First Machinery Corporation, 211 Tenth Street, Brooklyn 15, New York, has published a brochure entitled "Handy reference Engineering Constants", which is being made available free upon request to the company at the above address. The brochure contains a great deal of information in condensed form, and data required and used frequently by plant men. Data is also given on the company's new Ribbon Mixer or Blender.

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

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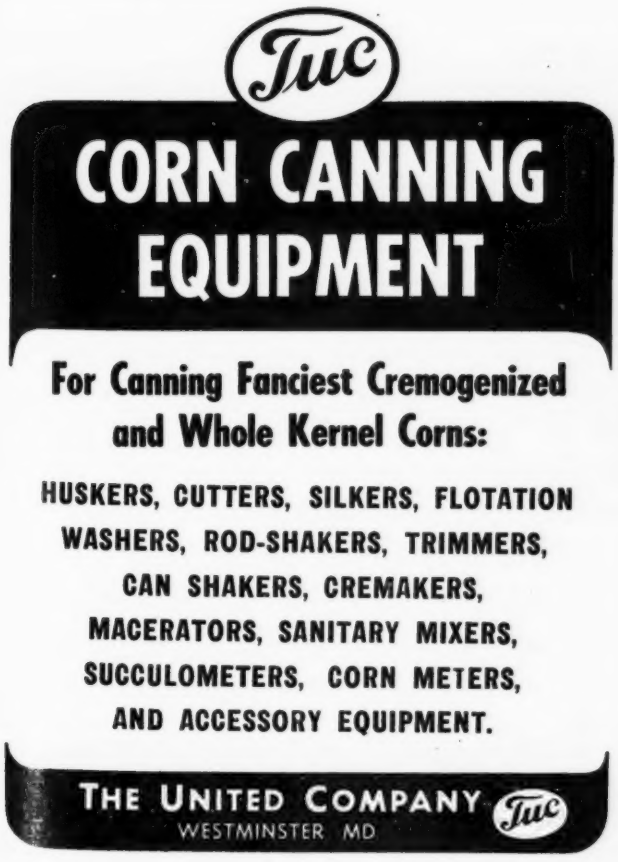
P.O. Box 248 Westminster, Md.

National Food Brokers Association has admitted the following firms to membership: Albany Food Brokerage Company, Albany, New York; E. B. Austin Company, Abilene, Texas; E. B. Austin Company, Amarillo, Texas; E. B. Austin Company, Dallas, Texas; Associated Brokerage Company, Baltimore, Maryland; Harold Barbee & Company, Raleigh, North Carolina; Walter C. Buehring, Philadelphia, Pennsylvania; Carothers & Carothers, Chattanooga, Tennessee; George DeGroot & Associates, Joplin, Missouri; William E. Derrick, Inc., New York, New York, G & G Associates, Whitestone, New York; E. A. Heyman & Company, Fort Wayne, Indiana; Hickman & Company, Milwaukee, Wisconsin; McFerren & Company, Denver, Colorado; Curt L. Rogers Company, Inc., Charlotte, North Carolina; Rust Brokerage, Portland, Oregon; Savarese & Cochrane, Charlotte, North Carolina; M. L. Stewart, Poplar Bluff, Missouri; Max Swartz & Sons, Wilkes-Barre, Pennsylvania; and Vince Vespa Company, Springfield, Illinois.

Paul D. Griem has been elected executive vice president of the **Glass Containers Corporation**, wholly owned subsidiary of Hunt Foods and Industries. Mr. Griem has been with the glass company for three years, serving as general manager for the past year. He was formerly with Owens-Illinois Glass Company. **Edward D. Goldstein**, an attorney and at one time a member of the company's legal staff, has been elected vice president of the Glass Containers Corporation.

CANNED POULTRY

Poultry used in canning and other processed foods in February, 1959 totaled 20,285,000 pounds ready-to-cook weight—up about 1 percent from the quantity used in February, 1958. The poultry used consisted of 15,155,000 pounds of chickens, 5,119,000 pounds of turkeys and 11,000 pounds of other poultry.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For Canning Fanciest Cremogenized and Whole Kernel Corns:
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THE UNITED COMPANY
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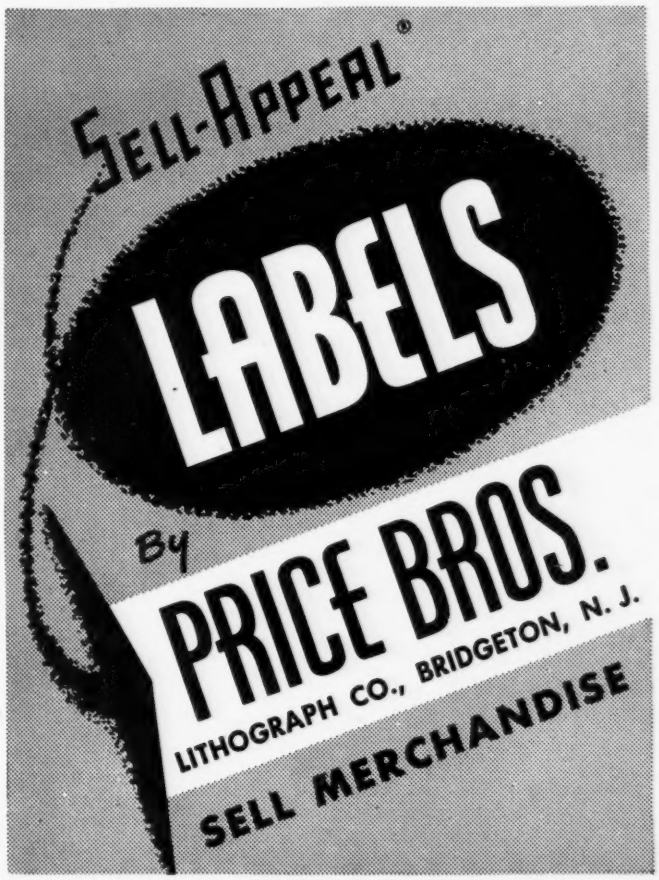


MARKET NEWS

CHICAGO MARKET

Replacement Buying Only — Whole Kernel Corn Tight — Tomatoes Lack Interest — Sliced Beets Move, Diced Slow—Applesauce Moving—Citrus Confused—Odds And Ends Fruits Show.

By "Midwest"

Chicago, Ill., April 9, 1959

THE SITUATION—The Chicago trade again this week continued to show a resistance toward buying anything except routine purchases to cover immediate requirements only. They do ask for the items which are impossible to buy but shy away from any real buying of those which are readily available. Some selling pressure is evident as a result of this negative attitude although the general market still appears strong. The selling pressure is spotty and seems concentrated currently on tomatoes, some tomato products, citrus and Elberta peaches. It will take something more than present efforts to arouse the trade from their legarthy.

The first major crop to make an appearance in this part of the country will be peas and planting will be a little late this year. The weather is excellent as this is written and if it continues planting of peas in Wisconsin should get under way about the 20th of the month. Acreage will be cut sharply and at least a dozen canneries that operated on peas last year will not do so during 1959. Below cost selling prices and a nation wide carryover of around ten million cases have done the damage. Even the major factors will show a heavy reduction in production this year but that is what it is going to take if prices are to be pushed anywhere near where a profit can be made. A couple of disastrous years from a profit standpoint have taken a heavy toll and just indicates that even a canner has to make a profit if he expects to stay in business.

CORN — Even the most optimistic buyer is now just about convinced that trying to find any whole kernel corn locally is a lost cause. There just isn't any. Those buyers who are smart enough to have a background with a responsible source of supply are now paying $1.70 for current shipments of fancy 303s and $9.25 for tens. There are no lower grades. Fancy cream style is not as tight but canners are asking and getting $1.60 and $9.00. Extra standard cream style is closely held at $1.35 and $7.50 but those canners with anything to sell are expected to increase these prices shortly by 5c on 303s and 25c on tens.

TOMATOES—No strength to the market here and the Eastern market which showed a tendency to move upward recently has again slipped to where standard 303s are offered here at $1.17½. Local canners are asking $1.30 for the same item but they are sure not setting any sales records. Extra standards have been offered here as low as $1.40 although the market is usually quoted at $1.45 to $1.50. There has never been any real buying interest in tomatoes at any time since the pack became available last September and there is nothing to indicate any change in the trade's attitude in the near future.

TOMATO PRODUCTS — California canners continue to offer such items as paste, puree, catsup and juice at all kinds of bargain prices which isn't doing local canners a bit of good. For a while it looked like the Midwest juice market was going to move up but then the advertised brands started kicking things around and now fancy 46 oz. is available at $2.20. California sources are as low as $2.10 with 2s at $1.00. Fancy catsup continues to hold it's own at $1.65 for 14 oz. and $10.00 for tens from local points but much lower quotations from the Coast constantly prevents prices from moving any higher.

BEETS AND CARROTS — Fancy sliced beets are cleaning up very nicely but the same thing cannot be said about certain other varieties such as whole and diced where some canners have a troublesome surplus. Prices in these cases vary considerably depending entirely who wants to move what and how much of the lot is available. Fancy sliced are steady and $1.15 for 303s and $5.00 to $5.50 for tens the latter price depending on the size of the slices involved. Diced carrots are proving somewhat burdensome and the market on fancy is no better that $1.00 on 303s and $5.00 on tens. Fancy sliced are not so plentiful and prices are firm at $1.25 and $7.00.

APPLESAUCE—Most of the industry have already advanced fancy sauce prices to the basis of $1.35 for 303s and $7.25 for tens. However, there are still a few canners willing to take business at 5c less on 303s and 25c less on tens. The trade here have not hesitated to buy and sales have been heavy at the lower level. The movement of sauce has been good and it should be in view of much higher prices on competing fruits.

CITRUS—Selling pressure seems to have developed all along the line where citrus is concerned and that includes even orange juice which was supposed to be strong and stay that way. Fancy grapefruit juice is down to $2.00 for 46 oz. in more than one place and while orange is quoted as high as $4.35 it is also offered as low as $4.10. Blended is likewise listed at a high of $3.35 but a low of $3.10. The trade are confused and when they are confused they are inclined to move cautiously which is exactly what they are doing now.

CALIFORNIA FRUITS—A few odds and ends of apricots are showing up and they are really just that as the quantities involved are retail and usually snapped up quickly. Fancy 2½s unpeeled halves sold here recently at $4.60 and a few choice at $3.85. Tens, which are the most desirable, have not made an appearance. Limited quantities of shelf size Clings are moving into this market and where they can be found prices are strong on the basis of $2.90 for choice 2½s $1.97½ for 303s. Again, as in the case of cots, no tens are offered and they are on every buyer's list. Cocktail in tens is the most sought after item on the list but every canner in California posted the sold out sign a long time ago.

NORTHWEST FRUITS — Canners in this area have done quite well on all fruit items with unsold stocks very spotty. There is a fair amount of pears offered with prices holding at $12.85 for tens,

CANNERS AND BROKERS—You can greatly assist us in keeping our "Canned Food Prices" page correct if you will put us on your mailing list to receive your price quotations as issued. THE CANNING TRADE, 20 S. Gay Street, Baltimore 2, Maryland.

$3.50 for 2½s and $2.30 for 303s all choice grade. Prune plums have not sold as well as they normally do but then the pack was way off and prices are holding steady. Current spot lists do not carry much and where they are offered choice grade plums are held at $2.65 for 2½s and $9.25 for tens. Royal Annes are almost non-existant and unsold supplies of black sweet cherries are very limited despite prices which the trade here felt were too high.

CALIFORNIA MARKET

Drougth Continues—Drive To Move Spots—Asparagus Packing In Full Swing — New Pack Spinach Moving — Tomato Growers Planting Without Contracts — Cling Peach, Cocktail Drive On—Salmon Stock Low.

By "Berkeley"

Berkeley, Calif., April 9, 1959

THE SITUATION—The drought continues unabated in all sections of California and is the most serious in many years but canners suggest that crops in which they are directly interested are making a better showing than was considered likely early in the new year. Growers in many districts have installed pumping equipment and expect to have fairly large crops but suggest that it is costing more to produce them and that prices on some items should be higher than in recent years. Canners are making special efforts to reduce holdings and some items are moving at well below the lists planned on new pack. Carryovers into the new season promise to be much lighter than seemed possible late in 1958 and already buyers are bidding for new pack for early delivery. This applies to most items in the list of both fruits and vegetables.

DRY BEANS — The California dry bean market is rather quieter and weaker than for some time, with canners confining purchases to small lots. The index number on this item has declined materially in recent weeks and is now listed at 205.3, compared with 220.9, a year earlier. Small White beans, in which canners are interested, are now moving at $10.15-$10.25 per 100 pounds for top grades, with Large Limas quoted at $11.25-$11.50 for select Southern California holdings.

ASPARAGUS—Canning operations on asparagus have now become quite general but the peak will not be reached for several weeks. The long continued warm weather brought the crop on about a week earlier than last year. Some canners are sold up on All-Green and will commence shipment of this item from new pack as soon as it can be made available. Early sales of this season's pack of All-Green have been reported at $3.60 for No. 300 Mammoth, but this is not taken to set the pace.

SPINACH—Some canners of spinach have completed their pack for the season, this having matured earlier than usual, owing to the warm weather. The new pack is moving off at about the same price lists that have prevailed in recent months, with strictly fancy selling at just above the $1.00 mark for 8-oz., $1.30 for No. 303, $2.00 for No. 2½s and $5.40 for No. 10.

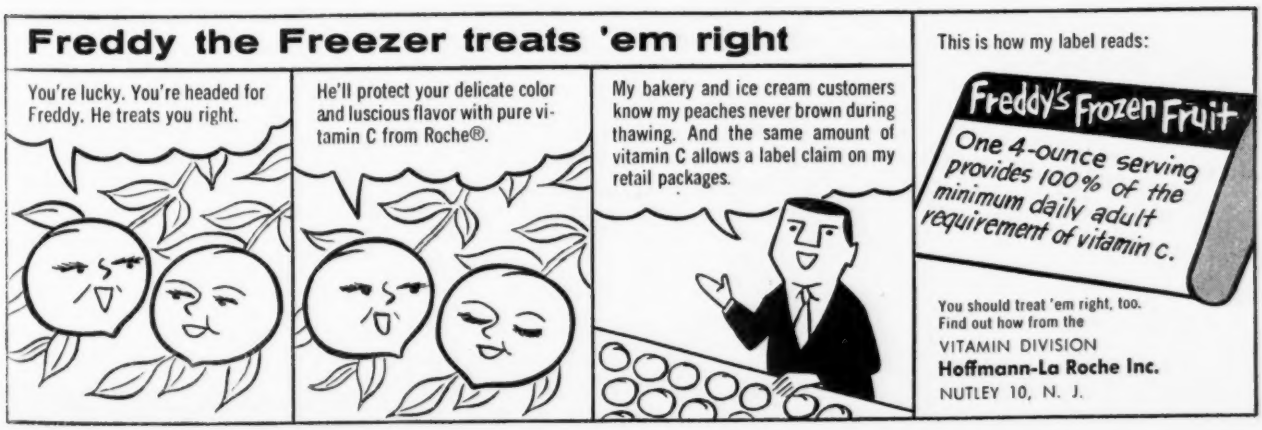
TOMATOES — The planting of tomatoes has been under way for sometime, weather conditions having made the early planting possible, but just what price will be paid growers is not settled. Many growers have made plantings without contracts with canners and this is causing considerable controversy. Canners are urging growers to hold down the acreage but there is no indication that this advice will be followed. Standard tomatoes are being offered here at $1.22½ for No. 303, $1.75 for No. 2½s and $6.50 for No. 10s. Some holdings are being moved at slightly higher prices. Special drives are under way on tomato paste with one of the largest canners offering one case free with every ten purchased, with this offer to be maintained to the end of April.

JUICES — Citrus products, with emphasis on juices, have been coming in for special attention of late, with the warm weather accounting for an improved demand. Four items in grape fruit juice have been priced downward by one large firm, with advances made on orange juice by the same firm. No. 2 unsweetened grapefruit juice is now priced at $1.00 a dozen and 46 oz. at $2.20, while unsweetened orange juice has been advanced to $1.97½ for No. 2 and to $4.55 for 46 oz. A week ago prices were advanced 25 cents a dozen on 46-oz. apple juice of Pacific Northwest pack, with most packers participating.

PEACHES—Some rather heavy shipments of cling peaches and fruit cocktail have been made to distributing centers throughout the country in recent weeks in connection with the heavy advertising campaign to get under way shortly. Prices of these items are largely without change but the campaign is expected to stimulate interest on a nation-wide scale. Fancy halves and sliced cling peaches have been moving of late at very close to $3.00 a dozen for No. 2½s, with No. 10s just under the $11.00 mark.

SALMON—Sales of canned salmon by canners were unusually light during the first week of April, but unsold stocks are quite low and a close cleanup is expected by the time new pack fish can be had from Alaska. Imports of Japanese salmon have been limited of late, but reports indicate that shipments to the East Coast are being made through the Panama Canal. Such sales of Alaska salmon as have been made of late have been on the basis of $34.00 a case for Red talls and $21.00 for Pinks.

SARDINES—Stocks of canned anchovies and mackerel are at low ebb in this market and any quoting of prices would be misleading. With sardines it is quite another story, as the pack was an unexpectedly large one. Sales of No. 1 natural are reported at $5.50 a case, with No. 1 ovals in tomato sauce moving at $7.25.


Freddy the Freezer treats 'em right
You're lucky. You're headed for Freddy. He treats you right.
He'll protect your delicate color and luscious flavor with pure vitamin C from Roche®.
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This is how my label reads:
Freddy's Frozen Fruit
One 4-ounce serving provides 100% of the minimum daily adult requirement of vitamin C.
You should treat 'em right, too.
Find out how from the
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NUTLEY 10, N. J.

A switch from foil to a metalized paper label on the Westgate-California Corporation's Bits-O'-Sea Tuna 6-ounce can has cut down on label spoilage without loss to the gleam effect. The economical metalized paper labels are manufactured by the Flexible Packaging Division of Continental Can Company, originator of metalized paper. With the new paper labels, handling by the label machine operator is facilitated and there is less waste due to curl than on the foil labels.

NEW PRODUCTS and PACKAGES

DUFFY-MOTT INTRODUCES TWO NEW JUICES

Two new blended fruit juice drinks were introducted to the Metropolitan New York area on April 6. Called "AM" and "PM", they are products of Duffy-Mott Company, Inc., processors of Mott's apple products, Sunsweet prune products and Clapp's Baby Foods.

The flavor of the "AM" drink is obtained by combining the juices of five fruits: orange, pineapple, apple, prune and apricot. According to the company, the drink is fortified with more Vitamin C than orange juice.

Flavor of the "PM" drink is obtained by blending apple juice and grape juice to produce what the company is promoting as "the new fruit juice refresher with the perky purple flavor." Fortified with Vitamins B-1 and B-2, it is being merchandised for use any time of day.

The companion drinks were developed in Duffy-Mott laboratories after literally hundreds of experiments with various juice combinations, and were taste-tested on panels which included school children and pre-schoolers, adults and adolescents, smokers and non-smokers, of both sexes. Object of the tests was to develop two drinks that would not only meet the taste requirements of the typical family, but would benefit them nutritionally.

Both drinks are being marketed in tall, lithographed, "picture window" quart cans. Expected retail selling price will be approximately 30c.

Introductory advertising will include 825 line ads in 25 metropolitan New York papers reaching nearly 4 million families. Radio spots on seven local stations will total 140 per week during the early stages of the campaign. The company also maintains 30 TV spots per week in the New York market, many of which will be used to promote the new products.

A complete kit of point of sale material will be supplied to the trade, including cart risers, shelf talkers, posters, and wrap-around banners.

CANCO SEES RECORD YEAR FOR AEROSOLS

A record year for the production of pressure cans is the forecast of American Can Company.

Robert Hollister, areosol sales executive of the company's Canco Division, predicts "the biggest year ever in the aerosol industry, with the production of 555 million pressure cans. This is a 15 per cent increase over the 483 million units produced in 1958."

Hollister said last year's increase over 1957 production of 420 million cans was due largely to the introduction of pressure-packed toothpaste. Other products introduced last year "that contributed to the increase and should prove promising both this year and in years following, are vitamin syrups, hand creams, flavored toppings, liquid soaps, auto waxes, and furniture polish."

As far as 1959 is concerned, Hollister thinks that insect repellents, dessert toppings and drugs (particularly vitamins) will be the leading growth items. "Cosmetics and toiletries, some of which probably will be seen for the first time in aluminum aerosols, also will contribute to the expected increase to 555 million cans in 1959," Hollister said.

It was noted that slightly more than 80 per cent of the expected can production will go to market containing non-food items. In this area, hair sprays, room deodorants, shaving lather, insect killers and repellents and paints are the volume leaders, Hollister said. The ratio of food to non-food products in aerosols has remained constant during increased overall production. About 70 million food cans were made in 1957; 85 million in 1958 and about 95-100 million are expected in 1959.

Appropriately "topping the field" in the food category are flavored (primarily chocolate) and whipped dessert toppings. "Thus far the packing of other food products has been of a negligible amount, though we should see the introduction of spreads, sauces, syrups and similar items in the not-too-distant future," the Canco executive said. Hollister pointed out that technical problems slowing down the commercial introduction of such items should be eliminated by anticipated developments in both containers and formulations of products.

Canco, a leading producer of aerosol cans, has expanded its manufacturing facilities to keep up with ever-increasing demand by packers.

A. H. F. TO HANDLE BANANA PRODUCTS

Exclusive sale and distribution in the United States and Canada of Pure Mashed Banana products under the "Chiquita" brand will be handled by the American Home Foods Division of American Home Foods Products Corporation under agreement with the United Fruit Company.

The 100 percent Pure Mashed Banana products, which require no freezing or refrigeration, are tropic-ripened bananas canned on Dominican Republic plantations by a new patented aseptic process which preserves their full flavor.

The new process provides a stable, convenient form of pure bananas for use by bakers, ice cream makers, confectioners, baby food manufacturers and institutions, according to E. L. Dosch, executive vice president of the American Home Foods. Advertising for these banana products will be handled by Batten, Barton, Durstine & Osborn, Inc.

Machiasport Canning Company, Eastport, Maine, is packaging its Maine Queen brand sardines in individual outer cartons to attract self-service customers. Each carton holds one key-type can of small size sardines in oil or mustard sauce. The sardines are being sold initially at a special introductory price. Cartons by Container Corp. of America.

AGRICULTURE

TOMATO PLANT GROWING METHODS AND YIELDS

With the cost of plants the largest single item of expense involved in growing tomatoes for processing, Prof. Charles B. Sayre, head of the Vegetable Crops Department at Cornell's New York State Experiment Station at Geneva, reports findings with tomato plants grown under various systems.

Recent experiments have shown that increasing the plant population from the previously recommended 3,000 plants per acre to 5,000 to 6,000 plants will produce larger yields and greater net returns where tomatoes are grown for processing.

Last year, growers paid from $13.50 to $15.00 per thousand for greenhouse grown tomatoes in flats, says Prof. Sayre, which meant a cost of $67.50 to $90 per acre just for plants.

In the Station tests three varieties were compared at different spacing distances and with plants from four sources. These included greenhouse-grown plants, plants grown in plastic houses, southern grown plants, and plants seeded directly in the field. Yields were recorded for early, midseason, and late pickings of red-ripe fruit acceptable for canning.

Where seed was sown directly in the field and the plants thinned to the desired stands, plant costs were reduced to a minimum. Direct seeding is not practicable in New York State with present varieties, however, because of the short growing season, explains Professor Sayre.

Substantial savings in growing tomato plants have been realized in recent years by growing plants in so-called plastic greenhouses. Southern-grown plants also have the advantage of low cost, but disadvantages of using these plants include danger of introducing diseases and insects, time in transit, and that the plants may arrive when field conditions are unsuited for planting, with consequent loss.

Plants grown in glass or plastic greenhouses have the advantage of disease control, beginning with seed and soil treatments, and that the plants can be held until conditions are suitable for transplanting.

DROSOPHILA FLY CONTROL

The Research Staff of **Chemical Insecticides Corporation**, having just completed an extensive experimentation program aimed at developing an insecticide that could be fogged on fruit and remain odorless, tasteless, and receive the approval of the Food and Drug Administration, has issued a new booklet entitled "Drosophila Fly Control". The Staff reports that excellent results have been obtained in laboratory and field experiments, with the help of major food processors. The booklet outlines the correct use of a scientifically balanced chemical that assures maximum kill at a minimum of cost. It is said to be tasteless and odorless when applied directly to fruits and vegetables. The literature explains when to fog and suggests measures for control of drosophila fly in food processing plants. Copies of the literature may be obtained by writing to the firm at Metuchen, New Jersey.

NEW SNAP BEAN RELEASED BY USDA

Tendercrop, new mosaic-resistant snap bean well adapted for processing — especially for commercial freezing and for use by home gardeners, has been released to seed growers by USDA. Several seed firms are offering limited quantities for first time this year to freezers and canners. Sufficient seed is expected to be available for commercial distribution to growers and home gardeners after 1959 crop season. USDA has no seed for sale or general distribution and cannot meet any requests for seed.

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Readers will find the Where to Buy Section helpful in locating firms to supply specific needs.

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CANNED FOOD PRICES

(Spot prices per dozen F.O.B. cannery unless otherwise specified.)

ASPARAGUS

Calif., Fcy., All Gr., No. 300
- Colossal 3.50
- Mammoth 3.45
- Large 3.40
- Med.-Small 3.30

Gr. Tip & Wh. Colossal 3.20
- Large 3.00-3.10
- Med-Small 3.00

Tri-St. Fcy., All Gr., No. 300
- Large 3.50
- Medium 3.35
- Small 3.25

Mid-W., Fcy., All Gr., Cuts & Tips
- No. 8 o. 1.35-1.40
- No. 1 Pic. 1.60
- No. 300 ..... 2.05-2.10
- No. 10 ..... 12.75

BEANS, STRINGLESS, GREEN

EAST

Fcy., Fr. Style, 8 oz. 1.00-1.05
- No. 303 ..... 1.50-1.60
- No. 10 ..... 9.00

Fcy., Cut, Gr., No. 303 ..... 1.35-1.45
- No. 10 ..... 8.50-9.25

Ex. Std., Cut Gr., 8 oz. ..... .97½
- No. 303 ..... 1.30
- No. 10 ..... 7.25

Std., Cut, No. 303 ..... 1.10-1.15
- No. 10 ..... 6.25

Gr. Wh., Fcy., 3 sv., No. 303 ..... 2.10
- No. 10 ..... 11.25

Wax, Fcy., Wh., 3 sv., No. 303 ..... 2.20
- No. 10 ..... 11.75

Cut, 3 sv., No. 303 ..... 1.50-1.60
- No. 10 ..... 8.50-9.00

Ex. Std., Cut, No. 303 ..... 1.35-1.40
- No. 10 ..... 8.75

Std., Cut, No. 303 ..... 1.30
- No. 10 ..... 6.75-7.00

MID-WEST

Gr., Wh., Fcy., No. 303 ..... 2.00-2.75
- No. 10 ..... 11.50-12.50

Fcy., Cut, No. 303 ..... 1.45-1.55
- No. 10 ..... 8.50-9.25

Ex. Std., No. 303 ..... 1.30-1.45
- No. 10 ..... 7.50-9.00

Std., Cut, No. 303 ..... 1.10-1.20
- No. 10 ..... 6.50-7.25

Wax, Fcy., Cut, 3 sv.,
- No. 303 ..... 1.50-1.60
- No. 10 ..... 8.75-9.25
- 4 sv., No. 303 ..... 1.50-1.55
- No. 10 ..... 8.50-8.75

Ex. Std., No. 303 ..... 1.30-1.45
- No. 10 ..... 7.75-8.25

SOUTH

Fcy., Wh. Gr., No. 303 ..... 1.65-1.75
- No. 10 ..... 7.75-8.50

Fcy., Cut, Gr., No. 303 ..... 1.45
- No. 10 ..... 7.75-8.00

Ex. Std., No. 303 ..... 1.35
- No. 10 ..... 7.00-7.50

Std. No. 303 ..... 1.15-1.17½
- No. 10 ..... 6.50-6.75

BLUE LAKES

Cut, Fcy., 3 sv. No. 303 ..... 1.77½
- No. 10 ..... 9.75

Ex. Std., 5 sv., No. 303 ..... 1.40-1.45
- No. 10 ..... 8.25

Std., No. 303 ..... 1.35
- No. 10 ..... —

BEANS, LIMA

EAST

Fcy., Tiny Gr., No. 303 ..... 2.50
- No. 10 ..... 14.00

Small, No. 303 ..... 2.10
- No. 10 ..... 12.25

Medium, No. 303 ..... 1.90
- No. 10 ..... 11.00

Ex. Std., Gr. & Wh.
- No. 303 ..... 1.40

MID-WEST

Fcy., Tiny Gr., No. 303 ..... 2.35
- No. 10 ..... 13.00

Small, No. 303 ..... 2.15
- No. 10 ..... 12.00

Medium, No. 303 ..... 1.65
- No. 10 ..... 9.75

Ex. Std., Gr. & W., No. 303 ..... 1.45
- No. 10 ..... 8.75

BEETS

Md., Fcy., Cut, Diced,
- No. 303 ..... 1.15

Fcy., Sliced, No. 303 ..... 1.20-1.25

Midwest, Fcy., Sl., 8 oz. ..... .85
- No. 303 ..... 1.15
- No. 10 ..... 5.00-5.50

Diced, No. 303 ..... 1.00
- No. 10 ..... 4.75

CARROTS

East, Fcy., Diced, No. 303 ..... 1.15
- No. 10 ..... 6.00

Mid-West, Fancy, Diced,
- No. 303 ..... 1.00
- No. 10 ..... 5.00

Sliced, No. 303 ..... 1.25
- No. 10 ..... 7.00

CORN

EAST

W.K. & C.S. Golden

Fcy., No. 303 ..... 1.50-1.60
- No. 10 ..... 8.75-9.50

Ex. Std., No. 303 ..... 1.45-1.50
- No. 10 ..... 8.25-8.50

Std., No. 303 ..... 1.40
- No. 10 ..... 7.00

Shoepeg, Fcy., No. 303 ..... 1.75
- No. 10 ..... 9.00-10.00

Ex. Std., No. 303 ..... 1.60

MIDWEST

W.K., C.S., Gold., Fcy.,
- No. 12 oz. 1.55-1.65
- No. 303 ..... 1.55-1.70
- No. 10 ..... 8.75-9.25

Ex. Std., No. 303 ..... 1.40-1.55
- No. 10 ..... 8.50

Std., No. 303 ..... —
- No. 10 ..... —

Co. Gent. W.K. & C.S.

Fcy., No. 303 ..... 1.60-1.65
- No. 10 ..... 9.00-9.25

Ex. Std., No. 303 ..... 1.50-1.55
- No. 10 ..... 7.50-8.25

Std., No. 303 ..... —
- No. 10 ..... —

PEAS

EAST ALASKAS

Fcy., 1 sv., 8 oz. 1.75
- 1 sv., No. 303 ..... 2.75
- 2 sv., 8 oz. 1.40
- 2 sv., No. 303 ..... 2.20-2.25
- 2 sv., No. 10 ..... 12.75
- 3 sv., No. 303 ..... 1.50
- 3 sv., No. 10 ..... 9.75-9.85

Ex. Std., 2 sv., No. 303 ..... 1.75
- 3 sv., No. 303 ..... 1.30-1.40
- No. 10 ..... 8.75
- 4 sv., No. 303 ..... 1.20-1.30
- No. 10 ..... 8.50

Std., 3 sv., No. 303 ..... 1.25
- 3 sv., No. 10 ..... —
- 4 sv., No. 303 ..... 1.15-1.20
- No. 10 ..... 7.75
- Pod Run, No. 303 ..... 1.10
- No. 10 ..... —

EAST SWEETS

Fcy., Pod Run, No. 303 ..... 1.35-1.45
- No. 10 ..... 9.00

Ex. Std., No. 303 ..... 1.20
- No. 10 ..... 8.00-8.50

Std., No. 303 ..... 1.10
- No. 10 ..... 7.25-7.50

MIDWEST ALASKAS

Fcy., 1 sv., 8 oz. 1.60-1.70
- 1 sv., No. 303 ..... 2.55-2.60
- 1 sv., No. 10 ..... 12.25-14.25
- 2 sv., No. 303 ..... 1.95-2.10
- 2 sv., No. 10 ..... 11.50-12.50
- 3 sv., No. 303 ..... 1.60-1.62½
- No. 10 ..... 8.75-9.25

Ex. Std., 3 sv., 8 oz. 95-97½
- 3 sv., No. 303 ..... 1.35-1.45
- 3 sv., No. 10 ..... 7.50-8.50
- 4 sv., No. 303 ..... 1.20-1.25
- 4 sv., No. 10 ..... 7.00-7.75

Std., 3 sv., 8 oz. ..... .85-.90
- 3 sv., No. 303 ..... 1.15-1.25
- 3 sv., No. 10 ..... 7.25-7.50
- 4 sv., 8 oz. ..... .80
- 4 sv., No. 303 ..... 1.12½
- 4 sv., No. 10 ..... 6.75-7.00

MID-WEST SWEETS

Fcy., 3 sv., No. 303 ..... 1.50-1.62½
- No. 10 ..... 8.75-9.25

Fcy., 4 sv., No. 303 ..... 1.30-1.40
- No. 10 ..... 7.75-8.25

Ungraded, No. 303 ..... 1.25-1.50
- No. 10 ..... 8.25

Ex. Std., 3 sv., No. 303 ..... 1.35-1.45
- No. 10 ..... 7.50-8.50
- 4 sv., No. 303 ..... 1.20-1.25
- No. 10 ..... 7.00-7.50

Ungraded, No. 303 ..... 1.17½-1.27½
- No. 10 ..... 7.50

Std., Ung., No. 303 ..... 1.10-1.17½
- No. 10 ..... 6.75-7.25

PUMPKIN

Midwest, Fcy., No. 2½ 1.55-1.57½
- No. 10 ..... 5.50

East, Fcy., No. 2½ 1.50-1.55
- No. 10 ..... 5.50-5.75

SAUERKRAUT

Midwest, Fcy., No. 303 ..... 1.12½
- No. 2½ 1.55
- No. 10 ..... 5.25

N. Y., Fcy, 2½ 1.40
- No. 10 ..... 4.75

SPINACH

Tri-State, Fcy., No. 303 ..... 1.40-1.45
- No. 2½ 1.95-2.00
- No. 10 ..... 6.75-7.00

Ozark Fcy., No. 303 ..... 1.20
- No. 2½ 1.85
- No. 10 ..... 5.65

Calif., Fcy., No. 303 ..... 1.30
- No. 2½ 2.00
- No. 10 ..... 5.40

SWEET POTATOES

Tri-States, Syr., 8 oz. 1.05-1.10
- No. 3, Sq. 2.25-2.35
- No. 2½ 2.45-2.60
- No. 10 ..... 7.75-9.75

TOMATOES

TRI-STATES

Ex. Std., No. 303 ..... 1.45-1.50
- No. 2½ 2.40-2.50
- No. 10 ..... 7.50-8.00

Std., No. 1 ..... .95-1.00
- No. 303 ..... 1.17½-1.20
- No. 2½ 1.95-2.00
- No. 10 ..... 7.25

Fla., Std., No. 303 ..... 1.20-1.22½
- No. 2½ 2.00
- No. 10 ..... 6.75-7.00

Mid-West, Fcy., No. 1 ..... 1.40
- No. 303 ..... 1.85
- No. 2½ 3.20
- No. 10 ..... 10.00

Ex. Std., No. 1 ..... 1.15-1.20
- No. 303 ..... 1.45-1.55
- No. 2½ 2.50-2.60
- No. 10 ..... 7.75-8.00

Std., No. 1 ..... 1.02½
- No. 303 ..... 1.30-1.35
- No. 2½ 2.10
- No. 10 ..... 7.25

Calif., Fcy., S.P., No. 303 ..... 1.75
- No. 2½ 2.40-2.50
- No. 10 ..... 9.50

Std., No. 303 ..... 1.20-1.25
- No. 2½ 1.75-1.80
- No. 10 ..... 6.25-6.50

Ozarks, Std., No. 303 ..... 1.35-1.40
- No. 10 ..... 7.75

Texas, Std., No. 303 ..... —
- No. 10 ..... 8.00

TOMATO CATSUP

Calif., Fcy., 14 oz. 1.50
- No. 10 ..... 8.75

Mid-West, Fcy., 14 oz. 1.65
- No. 10 ..... 10.00

East, Fcy., 14 oz. 1.80-1.90
- No. 10 ..... 10.50

TOMATO PASTE (Per Case)

Calif., Fcy., 96/6 oz. 7.00-7.20
- No. 10 (per doz.) 26% 9.75

Mid West
- No. 10 (per doz.) 26% 12.00
- No. 10 (per doz.) 30% ..... —

TOMATO PUREE

Calif., Fcy., 1.06, No. 303 ..... 1.45-1.55
- No. 10 ..... 6.25

Mid-West, Fcy., 1.045.
- No. 1 ..... 1.00
- No. 10 ..... 6.50

Md., Fcy., 1.045, No. 1 ..... 1.05
- No. 10 ..... 7.00

FRUITS

APPLE SAUCE

East, Fcy., No. 303 ..... 1.30-1.35
- No. 10 ..... 7.00-7.25

Std., No. 303 ..... 1.20
- No. 10 ..... —

Calif. (gravensteins)
- No. 303, Fcy. 1.35
- No. 10 ..... 8.25

Choice, No. 303 ..... 1.25
- No. 10 ..... 7.75

APPLES (East)

Sl., No. 10 ..... 9.00

APRICOTS (Nominal)

Halves, Fcy., No. 2½ 4.60-4.75
- No. 10 ..... 16.00

Choice, No. 2½ 3.80-3.85
- No. 10 ..... 13.85

Std., No. 2½ 3.35
- No. 10 ..... 12.45

S.P. Pie, No. 10 ..... 13.50

Fcy., Wh. Peeled, No. 2½ 4.60
- No. 10 ..... 16.00

BLUEBERRIES

No. 300 H/S 2.75

No. 10, Water 17.00

CHERRIES

R.S.P., Water, No. 303 ..... 2.25-2.35
- No. 10 ..... 13.50

R.A., Fcy., No. 2½ 6.00
- No. 10 ..... 20.25

Choice, No. 2½ 5.75-5.90
- No. 10 ..... 18.65

COCKTAIL

Fcy., No. 303 ..... 2.40
- No. 2½ 3.70-3.75
- No. 10 ..... 13.80

Choice, No. 303 ..... 2.30
- No. 2½ 3.50
- No. 10 ..... 13.20

GRAPEFRUIT SECTIONS

Fla., Fcy., No. 303 ..... 1.85

Fcy. Citrus Salad,
- No. 303 ..... 2.80

PEACHES

Calif., Cling Fcy., No. 303 ..... 2.07½
- No. 2½ 3.05-3.25
- No. 10 ..... 10.90

Choice, No. 303 ..... 1.97½
- No. 2½ 2.90
- No. 10 ..... 10.40-10.50

Std., No. 303 ..... 1.85-1.90
- No. 2½ 2.77½
- No. 10 ..... 9.80

Elberta, Fcy., No. 2½ 3.00-3.25
- No. 10 ..... 11.20-11.70

Choice, No. 2½ 2.87½-3.00
- No. 10 ..... 10.50

PEARS

Fcy., No. 303 ..... 2.45-2.50
- No. 2½ 4.00
- No. 10 ..... 14.00

Choice, No. 303 ..... 2.30
- No. 2½ 3.50
- No. 10 ..... 12.85

Std., No. 303 ..... 2.10-2.20
- No. 2½ 2.90
- No. 10 ..... 11.85

PINEAPPLE

Hawaiian, Fcy., Sl., No. 2 ..... 3.07½
- No. 2½ 3.60
- No. 10 ..... 13.40

Crushed, No. 2 ..... 2.50
- No. 2½ 3.05
- No. 10 ..... 10.50

Choice, Sl., No. 2 ..... 2.40
- No. 2½ 3.05
- No. 10 ..... 12.30

Std., Half Slices, No. 2 ..... 2.25
- No. 2½ 2.90
- No. 10 ..... 10.80

PLUMS, PURPLE

N.W., Fcy., No. 303 ..... 1.90-2.00
- No. 2½ 2.80-2.90
- No. 10 ..... 9.75

Choice, No. 303 ..... —
- No. 2½ 2.60-2.70
- No. 10 ..... 9.25

JUICES

APPLE

Midwest, 1 qt. gl. 1.95

46 oz. tin 2.60

CITRUS BLENDED

Fla., No. 2 ..... 1.40-1.50

46 oz. 3.10-3.35

GRAPEFRUIT

Fla., No. 2 ..... 1.02½-1.10

46 oz. 2.00-2.10

ORANGE

Fla., No. 2 ..... 1.75

46 oz. 4.10-4.35

Frozen, 6 oz. ..... —

12 oz. ..... —

32 oz. ..... —

PINEAPPLE

Hawaiian, Fcy., No. 2 ..... 1.35

46 oz. 2.85

TOMATO

East, Fcy., No. 2 ..... 1.30-1.45

46 oz. 2.40-2.50

No. 10 ..... —

Mid-West, Fcy., No. 2 ..... 1.25

46 oz. 2.20-2.25

Calif., Fcy., No. 2 ..... 1.00-1.02½

46 oz. 2.10-2.25

No. 10 ..... 4.60

FISH

SALMON—Per Case 48 Cans

Alaska, Red, No. 1T 33.00-34.00
- ½'s 19.50-21.00

Med., Red., 1T 27.00-28.00
- ½'s 15.00-15.50

P.S. Sockeye, ½'s 22.00-23.00

Pink, Tall, No. 1 ..... 21.00-22.00
- ½'s 13.00

Chum, Tall, No. 1 ..... 17.50-18.00
- ½'s 10.50-11.00

SARDINES—Per Case

Calif., Ovals, 24/1's 3.75

Ovals, 48/1's 7.25

No. 1 T., Nat. 5.50

Maine, ¼ Oil Keyless 8.00-8.50
- ¼ Oil Key Carton 10.50

SHRIMP-Dev. 4½ oz. per doz.

Jumbo 7.35-7.75

Large 6.85-7.20

Medium 6.15-6.50

Small 5.60-5.75

Broken 4.50-5.15

TUNA—Per Case

Fcy., White Meat, ½'s 12.00

Fcy., Light Meat, ½'s 11.00

Chunks 9.50

Grated 7.80